Connecting via Winsock to STN

```
Welcome to STN International! Enter x:x
```

LOGINID:ssspta1201txs

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

```
Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS
NEWS
                 "Ask CAS" for self-help around the clock
NEWS 3
        SEP 09
                 ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS 4
        OCT 03 MATHDI removed from STN
NEWS 5
        OCT 04
                CA/CAplus-Canadian Intellectual Property Office (CIPO) added
                 to core patent offices
                New CAS Information Use Policies Effective October 17, 2005
        OCT 13
NEWS 6
NEWS 7
        OCT 17
                 STN(R) AnaVist(TM), Version 1.01, allows the export/download
                 of CAplus documents for use in third-party analysis and
                 visualization tools
NEWS 8 OCT 27
                 Free KWIC format extended in full-text databases
NEWS 9 OCT 27
                DIOGENES content streamlined
NEWS 10 OCT 27
                EPFULL enhanced with additional content
NEWS 11 NOV 14
                CA/CAplus - Expanded coverage of German academic research
NEWS 12 NOV 30
                REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
                 spectral property data
                CASREACT(R) - Over 10 million reactions available
NEWS 13
        DEC 05
NEWS 14
        DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
NEWS 15 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS EXPRESS DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005.
              V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT
              http://download.cas.org/express/v8.0-Discover/
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS INTER
              General Internet Information
NEWS LOGIN
              Welcome Banner and News Items
NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
              CAS World Wide Web Site (general information)
```

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

FILE 'HOME' ENTERED AT 16:42:59 ON 14 DEC 2005

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 16:43:05 ON 14 DEC 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 13 DEC 2005 HIGHEST RN 869843-02-7 DICTIONARY FILE UPDATES: 13 DEC 2005 HIGHEST RN 869843-02-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

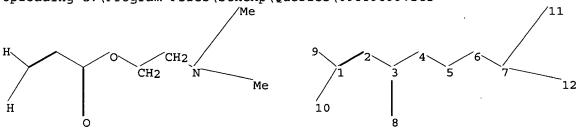
Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\09889699.str



chain nodes :

1 2 3 4 5 6 7 8 9 10 11 12

chain bonds :

1-2 1-9 1-10 2-3 3-4 3-8 4-5 5-6 6-7 7-11 7-12 exact/norm bonds :

3-4 3-8

exact bonds :

1-2 1-9 1-10 2-3 4-5 5-6 6-7 7-11 7-12

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS

50 ANSWERS

L1 STRUCTURE UPLOADED

=> s l1

SAMPLE SEARCH INITIATED 16:43:20 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1544 TO ITERATE

100.0% PROCESSED 1544 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 28523 TO 33237 PROJECTED ANSWERS: 12753 TO 15967

L2 50 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 16:43:25 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 30071 TO ITERATE

100.0% PROCESSED 30071 ITERATIONS 13739 ANSWERS

SEARCH TIME: 00.00.01

L3 13739 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
161.33
161.54

FILE 'CAPLUS' ENTERED AT 16:43:31 ON 14 DEC 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 14 Dec 2005 VOL 143 ISS 25

FILE LAST UPDATED: 13 Dec 2005 (20051213/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l3 and ammonium salt 17852 L3

1/852 Б3

356745 AMMONIUM

399 AMMONIUMS

356888 AMMONIUM

(AMMONIUM OR AMMONIUMS)

753216 SALT

585136 SALTS

1122183 SALT

(SALT OR SALTS)

43641 AMMONIUM SALT

(AMMONIUM(W)SALT)

L4 834 L3 AND AMMONIUM SALT

=> s 14 and (process or prepar? or make or made or synthes?)

2179896 PROCESS

1463923 PROCESSES

3247048 PROCESS

(PROCESS OR PROCESSES)

1601818 PREPAR?

119616 PREP

2128 PREPS

121540 PREP

(PREP OR PREPS)

1973033 PREPD

21 PREPDS

1973048 PREPD

(PREPD OR PREPDS)

114690 PREPG

12 PREPGS

114701 PREPG

(PREPG OR PREPGS)

2652213 PREPN

202242 PREPNS

2805043 PREPN

(PREPN OR PREPNS)

4643019 PREPAR?

(PREPAR? OR PREP OR PREPD OR PREPG OR PREPN)

220316 MAKE

171979 MAKES

380749 MAKE

(MAKE OR MAKES)

1179232 MADE

24 MADES

1179253 MADE

(MADE OR MADES)

1496005 SYNTHES?

L5 528 L4 AND (PROCESS OR PREPAR? OR MAKE OR MADE OR SYNTHES?)

=> s 15 and n,n-dimethylaminoethyl acrylate or DAMEA)

UNMATCHED RIGHT PARENTHESIS 'DAMEA)'

The number of right parentheses in a query must be equal to the number of left parentheses.

```
2863621 N
       2863621 N
         12688 DIMETHYLAMINOETHYL
        175119 ACRYLATE
         34425 ACRYLATES
        184436 ACRYLATE
                 (ACRYLATE OR ACRYLATES)
           177 N, N-DIMETHYLAMINOETHYL ACRYLATE
                 (N(W)N(W)DIMETHYLAMINOETHYL(W)ACRYLATE)
            20 DAMEA
            10 L5 AND (N, N-DIMETHYLAMINOETHYL ACRYLATE OR DAMEA)
1.6
=> d 16 ibib hitstr abs 1-10
     ANSWER 1 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2003:68376 CAPLUS
DOCUMENT NUMBER:
                         138:108328
                         Surface-coated supports having long-lasting
TITLE:
                         antisoiling property and coating process
                         therefor
                         Otani, Yukihiro; Sawada, Hideo
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Fukubi Chemical Industry Co., Ltd., Japan
                         Jpn. Kokai Tokkyo Koho, 18 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                        KIND
                                DATE
                                            APPLICATION NO.
                         ----
                                -----
                                            ------
     JP 2003025520
                         A2
                                20030129
                                            JP 2001-215311
                                                                   20010716
PRIORITY APPLN. INFO.:
                                            JP 2001-215311
                                                                   20010716
     2439-35-2, DMAEA
ΙT
     RL: RCT (Reactant); TEM (Technical or engineered material use); RACT
     (Reactant or reagent); USES (Uses)
        (crosslinking agents; antisoil finishing by application of photocurable
        primers and cationized F compound coatings and interlayer crosslinking)
     2439-35-2 CAPLUS
RN
CN
     2-Propenoic acid, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)
Me_2N-CH_2-CH_2-O-C-CH=CH_2
AB
     Supports are successively coated with photocurable primers and cationized
     F compound coatings and then exposed to actinic ray to bind the two layers
     by crosslinking agents which are included in one or both layers for
     effective amount The F compds. may have (oxa)fluoroalkyl terminal groups
```

=> s 15 and (N, N-dimethylaminoethyl acrylate or DAMEA)

acid) Na salt solution and then exposed to UV to give an antisoil-finished

triacrylate), Light Acrylate DPE 6A (dipentaerythritol hexaacrylate), and

and hydrophilic substituents. Thus, a soft PVC sheet was successively

A 400 (PEG diacrylate), Light Acrylate TMPA (trimethylolpropane

acrylate) and perfluoro[(2-propoxy)ethyl]-terminated poly(acrylic

DMAEA (N, N-dimethylaminoethyl

coated with a primer containing Kayarad UX 4101 (urethane acrylate), NK Ester

sheet showing water contact angle 3° initially and 6° after 40° + RH 95% treatment for 3 mo and dodecane contact angle 90° initially and 84° after the moisture treatment.

L6 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:428393 CAPLUS

DOCUMENT NUMBER: 135:168098

TITLE: Thermodynamic compatibility of modified cellulose

diacetates

AUTHOR(S): Ismailov, R. I.; Askarov, M. A.; Alimov, A. E.;

Toshbaev, G. A.

CORPORATE SOURCE: Tashkent. Inst. Tekstil'noi i Legkoi Promyshlennosti,

Tashkent, Uzbekistan

SOURCE: O'zbekiston Kimyo Jurnali (2000), (6), 51-52

CODEN: OKJZA6; ISSN: 0042-1707

PUBLISHER: Izdatel'stvo Fan

DOCUMENT TYPE: Journal LANGUAGE: Russian

IT 353466-56-5

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses) (thermodn. compatibility of cellulose diacetate blends with a quaternary ammonium compound polymer)

RN 353466-56-5 CAPLUS

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, iodide, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 353466-55-4 CMF C10 H18 N O4 . I

• I-

AB Thermodn. compatibility was studied in the system consisting of cellulose diacetate and a polymer of quaternary ammonium salt based on N,N-dimethylaminoethyl

acrylate quaternized with monoiodoacetic acid. Measurements of dioxane solvent sorption by the polymer blends for various polymer ratios were made along with the determination of free energy of mixing of the systems studied. Flory-Huggins interaction parameters are given for various rations of the polymers and solvent amt in the systems. Modification of the Scott equation for proper calcn. of the interaction parameters is briefly discussed.

L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:513657 CAPLUS

DOCUMENT NUMBER: 133:120801

TITLE: Method for making aqueous solutions of unsaturated

quaternary ammonium salts

INVENTOR(S): Riondel, Alain; Herbst, Gilles; Grosius, Paul

PATENT ASSIGNEE(S): Elf Atochem S.A., Fr. SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	PATENT NO.			KIND DATE			APPLICATION NO.				DATE						
WO	2000	0433	 48		A1	-	2000	0727	,	WO 2	000-	FR12	4		2	0000	120
	W:	ΑE,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
		CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
		IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	ΡL,	PΤ,	RO,	RU,	SD,	SE,	SG,	SI,
		SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,	YU,	ZA,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM								
	RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	ŞL,	SZ,	${ m TZ}$,	ŪĠ,	ZW,	ΑT,	ΒE,	CH,	CY,	DE,
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,
		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG				
FR	2788	767			A1		2000	0728		FR 1	999-	643			1	9990	121
	2788																
CA	2368									-			-			0000	120
	1104						2001			EP 2	000-	9006:	26		2	0000	120
EP	1104																
	R:						ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
			SI,														
	2511						2003								_		
	2206				Т3		2004	0516								0000	
PRIORITY	APP	LN.	INFO	. :												9990	
									•	WO 2	000-	FR12	4	1	₩ 2	0000	120

IT 44992-01-0P 46830-22-2P

RL: IMF (Industrial manufacture); PREP (Preparation) (continuous manufacture of aqueous solns. of unsatd. quaternary ammonium salts)

RN 44992-01-0 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} & \circ \\ || \\ \text{Me}_3 + \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{CH} = \text{CH}_2 \\ \end{array}$$

• cl -

RN 46830-22-2 CAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride (9CI) (CA INDEX NAME)

● cl -

IT 2439-35-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (continuous manufacture of aqueous solns. of unsatd. quaternary ammonium
salts)

RN 2439-35-2 CAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)

AB The invention concerns a method for making an aqueous solution of CH2:CHCO2CH2CH2Me2N+R (R = Me or PhMe), by reacting, in the presence of water, N,N-dimethylaminoethyl

acrylate with a MeCl or PhCH2Cl. Said method is characterized in that it consists in: carrying out said reaction continuously in a tubular reactor, introducing the quaternizing agent at the reactor base and introducing N,N-dimethylaminoethyl

acrylate and water at the top of the reactor, said reaction being carried out at a temperature between 35 to 60° and under pressure of 10-20 bars.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:513656 CAPLUS

DOCUMENT NUMBER: 133:135716

TITLE: Method for making aqueous solutions of unsaturated

quaternary ammonium salts

INVENTOR(S): Riondel, Alain; Herbst, Gilles; Esch, Marc

PATENT ASSIGNEE(S): Elf Atochem, S.A., Fr. SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.					DATE				
WO 2000043347			A1 20000727			WO 2000-FR123					20000120					
W	AE,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
	CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YŪ,	ZA,	ZW,	AM,

AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG 20000728 FR 1999-642 FR 2788766 A1 FR 2788766 B1 20010302 CA 2359976 AA 20000727 CA 2000-2359976 20000120 EP 2000-900625 20000120 EP 1144357 A1 20011017 EP 1144357 B1 20030820 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002535300 T2 20021022 JP 2000-594765 20000120 JP 3640612 B2 20050420 AT 247625 Ε 20030915 AT 2000-900625 20000120 ES 2204493 Т3 20040501 ES 2000-900625 20000120 PRIORITY APPLN. INFO.: FR 1999-642 A 19990121 WO 2000-FR123 W 20000120

OTHER SOURCE(S):

MARPAT 133:135716

IT 44992-01-0P, Acryloyloxyethyltrimethylammonium chloride

46830-22-2P, 2-Acryloyloxyethyl(benzyl)dimethylammonium chloride

RL: IMF (Industrial manufacture); PREP (Preparation)

(manufacture of aqueous solns. of acryloyloxyethyltrimethylammonium chloride and

acryloyloxyethylbenzyldimethylammonium chloride)

RN 44992-01-0 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride (9CI) (CA INDEX NAME)

● Cl -

RN 46830-22-2 CAPLUS

CN Benzenemethanaminium, N,N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride (9CI) (CA INDEX NAME)

• .c1 -

IT 2439-35-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of aqueous solns. of acryloyloxyethyltrimethylammonium chloride and

acryloyloxyethylbenzyldimethylammonium chloride)

RN 2439-35-2 CAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)

 $\begin{array}{c} & \text{O} \\ || \\ \text{Me}_2 \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{CH} = \text{CH}_2 \end{array}$

AB The invention concerns a method for making aqueous solns. of unsatd. quaternary ammonium salts by reacting, in the presence

of water, N, N-dimethylaminoethyl

acrylate with MeCl or PhCH2Cl, said method is characterized in that, in a closed reactor containing 5-60 weight% of N,N-

dimethylaminoethyl acrylate required for the reaction

and which has been pressurized with air or depleted air at 0.5 to 3 bars, the reaction is carried out by continuously introducing, at a temperature ranging between 35 to 65°, the quaternizing agent, and water, and finally the remaining N,N-dimethylaminoethyl

acrylate, until the desired concentration of salt in the water is reached. The water is introduced only when 0-20 weight% of the amount required for the quaternizing agent has been added. The remaining \mathbf{N} ,

N-dimethylaminoethyl acrylate is added only

when 20-80 weight% required for the quaternizing agent has been added. The pressure at the end of the reaction is 9 bars. The reactor is then depressurized while maintaining the oxygen content constant by simultaneous introduction of air and, after returning to atmospheric pressure, the residual quaternizing agent is eliminated. This **process** gives solns.

with low concns. of precipitated impurities.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2000:513655 CAPLUS

DOCUMENT NUMBER:

133:135715

TITLE:

Method for making aqueous solutions of unsaturated

quaternary ammonium salts

INVENTOR(S):

Riondel, Alain; Herbst, Gilles; Esch, Marc; Delaunay,

Eric; Meyer, Peter

PATENT ASSIGNEE(S):

Elf Atochem S.A., Fr.

SOURCE:

PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

French

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. --------------------WO 2000043346 A1 WO 2000-FR122 20000727 20000120 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG FR 2788765 20000728 FR 1999-641 A1

EP	2788 1144 1144	356			B1 A1 B1	2001 2001 2003	1017	EP	2000-	90062	24		2	0000	120
D1	R:	AT,	BE,			DK, ES,		GB, G	R, IT,	LI,	LU,	NL,	SE,	MC,	PT,
	2002	5352	•	21,	T2	2002			2000-				_	0000	
	2476 2204				E T3	2003 2004			2000- 2000-					0000: 0000:	
US PRIORITY	6521		INFO		В1	2003	0218		2001- 1999-		27	7	_	0010! 9990:	
INIONIII	. ALL	DI	LINIO	• •					2000-		2	V		0000	

IT 44992-01-0P, Acryloyloxyethyltrimethylammonium chloride
46830-22-2P

RL: IMF (Industrial manufacture); PREP (Preparation)

(manufacture of aqueous solns. of acryloyloxyethylbenzyldimethylammonium chloride and acryloyloxyethyltrimethylammonium chloride)

RN 44992-01-0 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} & \text{O} \\ || \\ \text{Me}_3 \text{+N-CH}_2 \text{-CH}_2 \text{-O-C-CH----} \text{CH}_2 \end{array}$$

• cl -

RN 46830-22-2 CAPLUS

• cl -

IT 2439-35-2, Dimethylaminoethyl acrylate

RL: RCT (Reactant); RACT (Reactant or reagent)

(manufacture of aqueous solns. of acryloyloxyethylbenzyldimethylammonium chloride and acryloyloxyethyltrimethylammonium chloride)

RN 2439-35-2 CAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)

$$\stackrel{\mathsf{O}}{\parallel}$$
 $\mathtt{Me_2N-CH_2-CH_2-O-C-CH=}$
 $\mathtt{CH_2}$

cosmetics)
229472-00-8 CAPLUS

RN

```
AΒ
    The invention concerns a method for making aqueous solns. of unsatd.
    quaternary ammonium salts by reacting, in the presence
    of water, N,N-dimethylaminoethyl
     acrylate with a MeCl or PhCH2Cl.
                                      Said method is characterized in
     that, in a closed reactor containing all the N, N-
     dimethylaminoethyl acrylate and which has been
    pressurized with air or depleted air at 0.5 to 3 bars, the reaction is
    carried out by continuously introducing, at temperature ranging between 35 to
     65°, the quaternizing agent, and water, until the desired concentration of
    salt in water is reached. The water is introduced only when 0-20 weight% of
    the amount required for the quaternizing agent has been added, and the
    pressure at the end of the reaction is allowed to reach 9 bars. The
    reactor is depressurized while maintaining the oxygen content constant by
    simultaneous introduction of air, and after returning to atmospheric pressure,
    residual quaternizing agent is eliminated. This process
    minimizes the formation of precipitated impurities in the product aqueous
solns.
REFERENCE COUNT:
                        5
                              THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
    ANSWER 6 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
                     1999:420948 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        131:88597
TITLE:
                        Non-sticky film-forming (meth)acrylic resins and their
                        use in hair cosmetics
INVENTOR(S):
                        Takiguchi, Hitoshi; Horihata, Noboru; Oda, Takashi
PATENT ASSIGNEE(S):
                        Kao Corp., Japan
                        Jpn. Kokai Tokkyo Koho, 11 pp.
SOURCE:
                        CODEN: JKXXAF
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
    PATENT NO.
                                         APPLICATION NO.
                      KIND DATE
                                                                  DATE
                               ----
                        ----
                                           -----
                        A2 19990706
    JP 11181029
                                          JP 1997-357150
                                                                  19971225
PRIORITY APPLN. INFO.:
                                           JP 1997-357150
                                                                  19971225
    229472-00-8P, N-tert-Butylacrylamide-N, N-
    dimethylaminoethyl acrylate-N-isopropylacrylamide-
    methoxypolyethylene glycol methacrylate graft copolymer
    229472-01-9P, N-tert-Butylacrylamide-N,N-
    dimethylaminoethyl acrylate-N, N-
    dimethylaminopropylacrylamide quaternary ammonium salt
    with methyl sulfate-N-isopropylacrylamide-methoxypolyethylene glycol
    methacrylate graft copolymer 229472-06-4P, N,N
    -Dimethylaminoethyl acrylate-N-isopropylacrylamide-
    methoxypolyethylene glycol methacrylate graft copolymer
    229472-08-6P, N-tert-Butylacrylamide-N, N-
    dimethylaminoethyl acrylate-2-ethyl-2-oxazoline-N-
    isopropylacrylamide-methoxypolyethylene glycol methacrylate graft
    copolymer 229472-11-1P, N,N-
    Dimethylaminoethyl acrylate-2-ethyl-2-oxazoline-N-
    isopropylacrylamide-methoxypolyethylene glycol methacrylate graft
    copolymer
    RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); PRP
     (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (non-sticky film-forming (meth)acrylic resins and use in hair
```

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester, polymer with N-(1,1-dimethylethyl)-2-propenamide, N-(1-methylethyl)-2-propenamide and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0 CMF (C2 H4 O)n C5 H8 O2 CCI PMS

$$\begin{array}{c|c} {\rm H_2C} & {\rm O} \\ \parallel & \parallel \\ {\rm Me-C-C} & {\rm CH_2-CH_2-CH_2-OMe} \end{array}$$

CM 2

CRN 2439-35-2 CMF C7 H13 N O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Me}_2 \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{CH} \Longrightarrow \text{CH}_2 \\ \end{array}$$

CM 3

CRN 2210-25-5 CMF C6 H11 N O

CM 4

CRN 107-58-4 CMF C7 H13 N O

RN 229472-01-9 CAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, methyl sulfate, polymer with 2-(dimethylamino)ethyl 2-propenoate, N-(1,1-dimethylethyl)-2-propenamide, N-(1-methylethyl)-2-propenamide and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

$$\begin{array}{c|c} H_2C & O \\ \parallel & \parallel & \\ \text{Me}-C-C & \boxed{ } O-CH_2-CH_2 \boxed{ } \\ \end{array} \quad \begin{array}{c} O \\ n \end{array} \quad \text{OMe}$$

CM 2

CRN 2439-35-2 CMF C7 H13 N O2

CM 3

CRN 2210-25-5 CMF C6 H11 N O

CM 4

CRN 107-58-4 CMF C7 H13 N O

CM 5

CRN 49734-91-0

CMF C9 H19 N2 O . C H3 O4 S

CM 6

CRN 45021-76-9 CMF C9 H19 N2 O

$$Me_3+N-(CH_2)_3-NH-C-CH=CH_2$$

CM 7

CRN 21228-90-0 CMF C H3 O4 S

Me- o- so3 -

RN 229472-06-4 CAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester, polymer with N-(1-methylethyl)-2-propenamide and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

CCI PMS

$$\begin{array}{c|c} {\rm H_2C} & {\rm O} \\ & \parallel & \parallel \\ {\rm Me-C-C} & {\rm C-H_2-CH_2-CH_2-OMe} \end{array}$$

CM 2

CRN 2439-35-2 CMF C7 H13 N O2

$$\begin{array}{c} & \text{O} \\ || \\ \text{Me}_2 \text{N} - \text{CH}_2 - \text{CH}_2 - \text{O} - \text{C} - \text{CH} \Longrightarrow \text{CH}_2 \\ \end{array}$$

CM 3

CRN 2210-25-5 CMF C6 H11 N O

RN 229472-08-6 CAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester, polymer with N-(1,1-dimethylethyl)-2-propenamide, 2-ethyl-4,5-dihydrooxazole, N-(1-methylethyl)-2-propenamide and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2-ethanediyl), graft (9CI) (CA INDEX NAME)

CM 1

CRN 26915-72-0 CMF (C2 H4 O)n C5 H8 O2 CCI PMS

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{C-} & \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array} \right]_n \text{OMe}$$

CM 2

CRN 10431-98-8 CMF C5 H9 N O

CM 3

CRN 2439-35-2 CMF C7 H13 N O2

CM 4

CRN 2210-25-5 CMF C6 H11 N O

CM 5

CRN 107-58-4 CMF C7 H13 N O

229472-11-1 CAPLUS

PMS

2-Propenoic acid, 2-(dimethylamino)ethyl ester, polymer with CN 2-ethyl-4,5-dihydrooxazole, N-(1-methylethyl)-2-propenamide and α -(2-methyl-1-oxo-2-propenyl)- ω -methoxypoly(oxy-1,2ethanediyl), graft (9CI) (CA INDEX NAME)

CM

CRN 26915-72-0 (C2 H4 O)n C5 H8 O2 CCI

$$H_2C$$
 O $Me-C-C-C-C-C-C-C-C-C-C-M_2$ OMe

CM

CRN 10431-98-8 CMF C5 H9 N O

CM3

CRN 2439-35-2 CMF C7 H13 N O2

$$\begin{array}{c} & \text{O} \\ \parallel \\ \text{Me}_2 \text{N-CH}_2 \text{-CH}_2 \text{-O-C-CH-----} \text{CH}_2 \end{array}$$

CM 4

CRN 2210-25-5 CMF C6 H11 N O

AB The resins are obtained from N-substituted (meth)acrylamide compds., (meth)acrylic acid esters or amides bearing amino or quaternary ammonium groups, and alkoxylated derivs. of (meth)acrylic acids, and are useful for hair-setting compns. with easy shampooing. Thus, polymerizing N-tert-butylacrylamide 15 with N-isopropylacrylamide 80, N, N-dimethylaminoethyl acrylate 1.5 and methoxypolyethylene glycol methacrylate 3.5 parts using azo type initiator gave a copolymer 3 parts of which was formulated with Emulgen Emulgen 109P (PEG lauryl ether) 0.5, KF-352A (polyether-polysiloxane) 1.5, EtOH 10.0 and balance of water to 100 parts to gave a hair set composition

L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:9382 CAPLUS

DOCUMENT NUMBER:

126:31085

TITLE:

Preparation of unsaturated quaternary

ammonium salts

INVENTOR(S):

Nagamoto, Akimoto; Imamura, Koichi

PATENT ASSIGNEE(S):

Kojin Kk, Japan

SOURCE:

Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08268985	A2	19961015	JP 1995-94153	19950329
PRIORITY APPLN. INFO.:	•		JP 1995-94153	19950329
OTHER SOURCE(S):	MARPAT	126:31085		

IT 2439-35-2

MARPAT 126:31085

RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of unsatd. quaternary ammonium
 salts by quaternization of amines by MeCl)

RN 2439-35-2 CAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)

AB Highly pure CH2:CR1COA(CH2)nN+MeR2R3Cl- (I; R1 = H, Me; R2, R3 = C1-4 alkyl; A = O, NH; n = 2-4), useful as polymer coagulants, paper-strengthening agents, antistatic agents, soil and dye additives, etc. (no data), are prepared by reaction of CH2:CR1COA(CH2)nNR2R3 (R1-3, A, n = same as I) with MeCl in solvents after enhancing MeCl pressure in reactors. A mixture of 417 weight parts N,N-dimethylaminoethyl acrylate, Me2CO, H2O, and p-methoxyphenol was kept under 1.0 kg/cm2 MeCl pressure for 5 min and allowed to react with MeCl at .apprx.40° under .apprx.1.0 kg/cm2 for 5 h to give 712 weight parts 80 weight% I (R1 = H, R2 = R3 = Me, A = O, n = 2) containing 696 ppm acrylic acid.

L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1989:240278 CAPLUS

DOCUMENT NUMBER:

110:240278

TITLE:

Image formation using water-soluble photosensitive

resin

INVENTOR(S): Hayama, Kazuhide; Yamashita, Akira

PATENT ASSIGNEE(S): Mitsubishi Petrochemical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE: Patent Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				
JP 63183443	A2	19880728	JP 1987-15829	19870126
PRIORITY APPLN. INFO.:			JP 1987-15829	19870126

IT 2439-35-2D, quaternary ammonium salt with

amino group-containing acrylic polymer 26246-82-2D, quaternary

ammonium salt with glycidyl methacrylate
69596-46-9D, quaternary ammonium salt with

glycidyl methacrylate 120895-83-2D, quaternary ammonium

salt with glycidyl methacrylate

RL: USES (Uses)

(water-soluble cationic resin from, for overhead projection slide)

RN 2439-35-2 CAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)

RN 26246-82-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with dodecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & {\rm O} & {\rm CH_2} \\ \parallel & \parallel \\ {\rm Me_2N-CH_2-CH_2-O-C-C-Me} \end{array}$$

CM 2

CRN 142-90-5 CMF C16 H30 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me- (CH}_2)_{\,11} - \text{O- C- C- Me} \end{array}$$

RN 69596-46-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, cyclohexyl ester, polymer with

2-(dimethylamino)ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 101-43-9 CMF C10 H16 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

RN 120895-83-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-ethoxyethyl 2-methyl-2-propenoate and ethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N--} & \text{CH}_2 - \text{CH}_2 - \text{O--} & \text{C--} & \text{Me} \end{array}$$

CM 2

CRN 2370-63-0 CMF C8 H14 O3

CM 3

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

CM

CRN 97-63-2 CMF C6 H10 O2

$$^{\rm H_2C}_{||}$$
 O || || Me-C-C-OEt

The title image formation comprises the steps of: (1) applying a H2O-soluble AB cationic synthetic resin on a substrate; (2) drying; (3) recording using a H2O-based ink, an oil-based ink, or ribbon, or superposing a neg.-working film; (4) irradiating with an energy beam to harden the exposed parts; and (5) developing with H2O to wash away the unexposed parts. A material on which image was formed has a cationic electrolytic resin on the surface, and hence has good antistatic effect.

ANSWER 9 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1989:24434 CAPLUS

DOCUMENT NUMBER:

110:24434

TITLE:

Process for preparing unsaturated

quaternary ammonium salts

INVENTOR(S):

Nagatsu, Yoshirou; Nagamoto, Akiyoshi; Harada, Kazuya;

Mukouyama, Hideaki

PATENT ASSIGNEE(S):

Kohjin Co., Ltd., Japan PCT Int. Appl., 15 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -------------------WO 8806152 A1 19880825 WO 1988-JP165 19880218

W: AU, KR, US RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE JP 63201151 19880819 JP 1987-33192 19870218 A2 JP 07100683 19951101 R4 19880914 AU 8812980 A1 AU 1988-12980 19880218 AU 608575 R2 19910411 EP 302122 EP 1988-901916 A1 19890208 19880218 EP 302122 B1 19930512 R: BE, CH, DE, FR, GB, LI 19921020 CA 1988-566720 CA 1309107 A1 19880513 PRIORITY APPLN. INFO.: JP 1987-33192 A 19870218 WO 1988-JP165 A 19880218

OTHER SOURCE(S): MARPAT 110:24434

IT 2439-35-2

RL: RCT (Reactant); RACT (Reactant or reagent)

(quaternization of, with Me chloride, in aqueous acetone)

RN 2439-35-2 CAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX NAME)

AB Compds. CH2:CR1COABNR2R3 (R1 = H, Me; R2, R3 = C1-4 alkyl group, A = O, NH; B = C1-4 alkylene) are treated with alkyl or aralkyl halides in mixts. of water and aprotic organic solvents containing 0.3-1.8 ppm dissolved O to prepare the title compds. During the reaction, the ammonium salts are not precipitated and smooth stirring of the reaction mixts. and heat removal are achieved. Thus, N,N-dimethylaminoethyl acrylate 200, acetone 44.4, p-MeOC6H4OH 0.4, and H2O 22.2 g were mixed, blown with N to O concentration 1.5 ppm, and treated with MeCl to prepare the corresponding ammonium salt. Polymerization occurred when 67.6 g H2O containing no acetone was used as a solvent.

L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1968:41239 CAPLUS

DOCUMENT NUMBER: 68:41239

TITLE: Thioated cellulosic-amylaceous substrate-ethylen-cally

unsaturated monomer graft copolymer

INVENTOR(S): Faessinger, Robert W.; Conte, John S.

PATENT ASSIGNEE(S): Scott Paper Co.
SOURCE: U.S., 21 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3359224		19671219	US .	19661207

IT 2867-47-2

RL: USES (Uses)

RN 2867-47-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester (9CI) (CA INDEX

NAME)

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2\text{N-CH}_2\text{-CH}_2\text{-CH}_2\text{-O-C-C-Me} \end{array}$$

AB A water-insol., cellulosic or amylaceous monothiocarbonate or dithiocarbonate polymeric substrate is treated via peroxidic free radical initiated graft polymerization, with an ethylenically unsatd. monomer to produce

a graft copolymer. Typically, 10 parts of dry, defibered, bleached southern pine sulfate pulp was treated with 0.25M Na silicate solution to cover the pulp, the mix was kept at room temperature 0.25 hr., then filtered to such a dryness that the alkaline wet pulp retained 100% of its weight of Na silicate solution The cellulose pad was crumbled and evacuated over CS2, after 2 hrs., the dithiocarbonated pulp crumbles were washed with 300-50 parts water to remove all soluble products, the dithiocarbonated pulp was uniformly dispersed in a previously prepared emulsion consisting of styrene 9, acrylonitrile 1, water 300, Tween-85 (a poly(oxyethylene) sorbitan trioleate) 1.0, and 30% H2O2 2.5 parts. The mixture was kept at room temperature for 24 hrs., the pulp was removed from the polymerization mixture,

thoroughly washed with water, and a product weighing 17.85 parts (89.6% theory) was obtained. Prolonged extraction of the material with trichloroethylene indicated that 69.2% of the monomer which was converted to the polymer could not be extracted Similarly, 10 parts of dry defibered bleached southern pine sulfate pulp was defibered and treated with the monomers to give [alkaline salt, concentration of alkaline solution, % yield, % nonextractable polymer given]: NaOH, 0.5M, 84.3, 44.2; Na2S, 0.25M, 88.5, 50.5; NaCN, 0.25M, 79.0, 78.4; Na2O.AlO2, 0.25M, 87.3, 78.0; Na2CO3, 0.25M, 75.0, 68.5; (NH4)2S, 0.25M, 62.5, 86.1. Alternatively, 10 parts dry bleached pine sulfate pulp was defibered in sufficient 1% NaOH and filtered to a retention of 100% alkali solution The alkali cellulose was then thiocarbonated over CS2, the resulting Na cellulose anhydroglucose monothiocarbonate was washed well with 300 parts water, then with 25 parts 0.25M Pb(OAc)2 diluted with 75 parts water, the lead cellulose anhydroglucose monothiocarbonate pulp was washed with 150 parts water, then uniformly dispersed in an emulsion containing water 300, styrene 9, acrylonitrile 1, Tween 85 0.5, and 30% H2O2 3 parts. The mixture was kept at room temperature for 24 hrs., the pulp was removed from the polymerization medium,

thoroughly washed with water, and dried to yield 16.7 parts (83.5%) pulp. Repeated extns. with trichloroethylene indicated that 90.3% of the monomer converted to the polymer was unextractable. Also, an aged viscose dope solution, containing 6.5% cellulose, was pumped through a spinneret and through a

2-ft. long coagulating bath of 10% H2SO4, 13% Na2SO4, 1% glucose, and 1% ZnSO4. On emergence from the coagulating bath, the filaments fell into an aqueous bath consisting of a saturated solution Na2CO3; the fibers were kept in the

Na2CO3 15 min. to give 1.5 parts thiocarbonate containing regenerated cellulose. The thiocarbonate was suspended in the emulsion containing Et acrylate 9.3, Tween 85 0.5, water 40, and 30% H2O2 3.0 parts, the mixture was kept at room temperature for 18 hrs., the copolymd. regenerated cellulose was removed from the polymerization mixture, washed throughly with water, and gave

a product after oven drying weighing 8.2 parts (72.5% conversion), which upon prolonged extraction with acetone indicated that 65.0% of the polymer was

nonexchangeable. Similarly, 25 parts of a viscose dope solution was poured into a container containing 6.0 parts H2SO4 and 300 parts saturated Na2SO4, the regenerated cellulose was filtered and washed throughly with water to remove all soluble by-products, immediately after washing, 100 parts of 0.06M Ca(NO3)2 was passed over and through the Na thiocarbonate containing regenerated cellulose to form its Ca derivative by metathesis, the Ca containing

product was washed with water, and was added to an emulsion prepd. from Et acrylate 9.3, water 50, Tween 85 0.5, and 30% H2O2 3.0 parts, the mixture was kept at room temperature for 18 hrs., the regenerated cellulose copolymer was washed with water and dried to give 9.6 parts copolymer (86.5% conversion), which on prolonged extraction in acetone showed that 80.5% of the copolymer was unextractable. Similarly, various salts were used in the metathesis reaction to form the various derivs., including as cation, ferrous, Pb, Al, Mg, or Zn salts. Monomers similarly used were Bu acrylate, glycidyl acrylate, 2-cyanoethyl acrylate, methacrylic acid, methacrylamide, Me methacrylate, Et methacrylate, hydroxyethyl methacrylate, hydroxypropyl methacrylate, glycidyl methacrylate, vinylidene chloride, Na p-styrenesulfonate, N,N-dimethylaminoethyl acrylate, 2-ethylhexyl acrylate, vinyl chloride, vinyl acetate, isoprene, styrene, and vinyltoluene. Similarly converted cellulosic materials contain potato starch.

=> log y COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION						
FULL ESTIMATED COST	74.33	235.87						
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION						
CA SUBSCRIBER PRICE -7.30								

STN INTERNATIONAL LOGOFF AT 16:46:35 ON 14 DEC 2005